

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Lee, et al.

Serial No. TBA

Filing Date: Herewith

Confirmation No.: TBA

Examiner: TBA

Docket No. 050324-1322

For: **LOW POWER VOLTAGE TO CURRENT CONVERTER**

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98. Listed on the accompanying form PTO-1449 are documents which may or may not be considered material to the examination of this application. These documents were made of record in a prior application filed November 21, 2000 and having serial no. 09/718,963, to which priority is claimed relative to the present application pursuant to 35 U.S.C. §120. Copies of these documents are not being provided pursuant to 37 C.F.R. § 1.98(d)(1) and (2), which provides:

(d) A copy of any patent, publication, pending U.S. application or other information, as specified in paragraph (a) of this section, listed in an information disclosure statement is required to be provided, even if the patent, publication, pending U.S. application or other information was previously submitted to, or cited by, the Office in an earlier application, unless:

(1) The application is properly identified in the information disclosure statement and is relied on for an earlier effective filing date under 35 U.S.C. §120; and

(2) The information disclosure statement submitted in the earlier application complies with a paragraphs (a) through (c) of this section.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.


This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully submitted,

**THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.**

By:

  
**Troy A. VanAacken; Reg. No. 50,847**

100 Galleria Parkway, Suite 1750  
Atlanta, Georgia 30339-5948  
770-933-9500

Form PTO-1449					Attorney Docket No. <b>050324-1322</b>		Serial No. <b>TBA</b>	
<b>INFORMATION DISCLOSURE CITATION</b>					Applicant <b>Lee, et al.</b>			
<i>(Use several sheets if necessary)</i>					Filing Date <b>Herewith</b>		Group <b>TBA</b>	
<b>U.S. PATENT DOCUMENTS</b>								
Examiner Initials	Item	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	1	4,931,749	6/5/99	Walters			10/17/88	
	2	5,066,870	11/19/91	Kobatake			6/20/90	
	3	5,233,314	8/3/93	McDermott et al.			10/13/92	
	4	5,392,205	2/21/95	Zavaleta			11/7/91	
	5	5,920,233	7/6/99	Denny			11/18/96	
	6	5,491,439	2/13/96	Kelkar et al.			8/31/94	
	7	5,629,650	5/13/97	Gersbach et al.			1/29/96	
	8	5,646,563	9/30/96	Kuo			7/8/97	
	9	5,692,164	11/25/97	Pantelakis			12/18/96	
	10	5,703,511	12/30/97	Okamoto			10/23/96	
	11	5,740,213	4/14/98	Dreyer			6/3/94	
	12	5,767,736	6/16/98	Lakshmikumar et al.			5/27/97	
	13	5,870,003	2/9/99	Boerstler			10/3/97	
	14	5,886,551	3/23/99	Narahara			3/25/97	
	15	5,936,445	8/10/99	Babanezhad et al.			3/21/97	
	16	6,011,822	1/4/00	Dreyer			4/17/97	
	17	6,028,473	2/22/00	Kamei et al.			3/9/95	
	18	6,028,780	2/22/00	Chang			3/12/98	
	19	6,058,033	5/2/00	Williams et al.			10/8/98	
	20	6,064,251	5/16/00	Park			8/27/97	
	21	6,067,336	5/23/00	Peng			10/1/98	
	22	6,075,406	6/13/00	Lee et al.			6/16/98	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)</b>								
<p>* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.</p>								
EXAMINER'S SIGNATURE:					DATE CONSIDERED:			



IP SCHEDULE A  
(6/7/02)

ACTIVE US PATENTS/APPLICATIONS & DISCLOSURES

Granted US Patents

Patent No.	Patent Title	Status	Amount	Effective Date	Expiration Date
1 00CX0174W	Synthetic Quadrature Generating Apparatus	Granted	176,181	13-Sep-1985	22-Nov-1988
2 00CX0185D	Matched Filters for Processing Related Signal Components	Granted	571,596	13-Dec-1985	01-Apr-1987
3 90E131	Shielded Amplifier	Granted	354,840	04-Mar-1982	12-Jun-1984
4 92E035	Parameter-Setting Approach to Obtain HIP-Performance CTD Transversal Filters for Devices with...	Granted	441,195	12-Nov-1982	03-Sep-1985
5 95E018	Uncompensated and Compensated GaAs Input Receivers	Granted	759,193	26-Jul-1985	27-Oct-1987
6 96E006	Third Mode Torsional E-M Resonator	Granted	849,093	07-Apr-1988	09-Apr-1991
7 90E052	Receiver Designed with Large Output Drive and Having Unique Input Protection Circuit	Granted	591,164	01-Oct-1990	23-Jun-1992
8 92E030	Symmetrical Clock Crystal Oscillator Circuit	Granted	98/155,500	22-Nov-1993	03-Oct-1995
9 93E032	Direct Connect Radio and Antenna Assembly	Granted	233,289	28-Apr-1994	25-Feb-1997
10 93E067	Variable Multi-Threshold Detection for 0.3-GMSK	Granted	307,202	16-Sep-1994	17-Oct-1995
11 94E005	Component Insensitive, Analog Bandpass Filter	Granted	196,325	15-Feb-1994	04-Jun-1996
12 94E059	Method and Apparatus for Controlling the Wakeup Logic of a Radio Receiver in Sleep Mode	Granted	98/514,509	11-Aug-1995	01-Dec-1998
13 95E002	An Iterative Filtering Frequency Estimator	Granted	515,403	15-Aug-1995	02-Jun-1998
14 95E003	An Adaptive Frequency Correction Burst Detector for the GSM Handset System	Granted	98/537,376	28-Sep-1995	03-Mar-1998
15 95E056	Jitter Circuit for Reduced Switching Noise	Granted	944,762	10-May-1996	19-May-1998

IP SCHEDULE A

16	95E071	Extended Time Tracking and Peak Energy In-Window Demodulation for Use in a Direct Sequence Spread Spectrum System	Granted	08/588,053	08-Dec-1995	5,778,022	07-Jul-1998	
17	95E072	Variable Digital Automatic Gain Control in a Cordless Direct Sequence Spread Spectrum Telephone	Granted	08/588,161	08-Dec-1995	5,764,689	09-Jul-1998	
18	95E080	Method and Apparatus for Signal Quality Estimation in a Direct Sequence Spread Spectrum	Granted	08/348,481	08-Jan-2000	3,301,287	09-Oct-2001	
19	96E008	Ultra-Clean Voltage Power Supply Generator	Granted	08/892,444	14-Jul-1997	3,049,724	11-Apr-2000	
20	97RSS036	An LC-VCO Charge-Pump and Loop-Filter Architecture for Improved Noise-Immunity in Integrated Phase-Locked Loops	Granted	08/409,509	30-Sep-1995	5,281,758	28-Aug-2001	
21	97RSS053	Timing Estimation in Mobile Communication Systems Using Parabolic Interpolator	Granted	08/163,840	30-Sep-1998	3,218,345	17-Apr-2001	
22	97RSS080	A Method and an Apparatus for Positioning System Assisted Cellular Radiotelephone Handoff and Droptail	Granted	09/025,962	19-Feb-1998	3,327,471	04-Dec-2001	
23	97RSS081	Cellular Radiotelephone Having Answering Machine/Voice Memo Capability with Parameter-Based Speech Compression and Decompression	Granted	08/028,619	20-Feb-1998	3,240,299	29-May-2001	
24	97RSS084	A Transistor Having a Novel Layout and an Emitter Having More Than One Feed Point	Granted	08/128,301	30-Jul-1995	3,236,071	22-May-2001	
25	97RSS088	Voltage Upconverter for Portable Time Divisional Multiple Access Radio	Granted	08/047,242	24-Mar-1998	3,078,187	20-Jun-2000	
26	97RSS100	Method and Apparatus for Automatic Gain Control With Improved Response Time and Stability	Granted	09/036,397	06-Mar-1998	3,037,834	14-Mar-2000	
27	97RSS105	Universal Radio Architecture for Low-Tier Personal Communication System	Granted	08/348,359	30-Nov-1994	5,848,885	15-Jul-1997	PCSI P036US Exhibit 2

28	97RSS107	Apparatus for and Method of Improving Efficiency of Transceivers in Radio Products	Granted	08/072,311	18-Nov-1997	5,163,706	19-Dec-2000	
29	97RSS113	Multi-Layer Carrier Module for Power Amplifier Systems within a Digital Cellular Telephone	Granted	08/041,488	30-Sep-1997	5,238,271	22-May-2001	
30	97RSS118	Modulation Technique for Multi-Band Applications	Granted	08/044,281	19-Mar-1998	5,005,443	21-Dec-1999	
31	97RSS116	RF Architecture for Cellular Dual Band Telephones	Granted	08/057,124	08-Apr-1998	5,208,675	27-Mar-2001	
32	97RSS120	Front End Filter Circuitry for a Dual Band GSM/DCS Cellular Phone	Granted	08/038,258	08-Mar-1998	5,125,271	28-Sep-2000	
33	97RSS122	Battery Management System With Current Measurement Across On-Resistance of Semiconductor Cutout Switch	Granted	08/040,630	30-Sep-1997	5,031,302	29-Feb-2000	
34	97RSS126	Dualband Power Amplifier Control Using A Single Power Amplifier Controller	Granted	08/065,843	07-Nov-1997	5,216,012	10-Apr-2001	
35	97RSS128	Low Voltage Medium Power Class C Power Amplifier With Precise Gain Control	Granted	08/084,114	21-Apr-1998	5,066,051	12-Oct-1999	
36	97RSS128	Non-Linear Constant Envelop Modulator and Transmitt Architecture	Granted	08/040,225	13-Mar-1998	5,078,628	20-Jun-2000	
37	97RSS151CON	Programmable Digital Modulator and Methods of Modulating Digital Data	Granted	08/330,577	27-Oct-1994	5,600,878	04-Feb-1997	PCSI P006US Exhibit 2
38	97RSS151	Programmable Digital Modulator and Methods of Modulating Digital Data	Granted	07/858,397	28-Mar-1992	5,420,887	30-May-1995	
39	97RSS154	Sample Interpolator and Method of Generating Additional Samples of a Sampled Waveform Using a Programmable Sample Divider	Granted	818,941	25-Aug-1997	5,937,010	10-Aug-1998	Continuation of Abandoned PCSI Exhibit 2 case
40	97RSS158	Near Direct Conversion Receiver and Method for Equalizing Amplitude and Phase Therein	Granted	08/521,568	30-Aug-1995	5,828,955	27-Oct-1998	PCSI P058US Exhibit 2

41	97RSS160CON	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	08/488,374	08-Jun-1995	5,710,782	20-Jan-1998	PCSI P020US1 Exhibit 2
42	97RSS160	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	08/145,745	28-Oct-1993	5,444,886	22-Aug-1995	PCSI P020US Exhibit 2
43	97RSS162	Receiver With Filter Offset Correction	Granted	08/516,197	17-Aug-1995	5,757,864	28-May-1996	PCSI P045US Exhibit 2
44	97RSS163	Method and Apparatus for Minimizing Perceptible Impact on an Interrupted Call Prior to Hand-Off	Granted	08/692,552	08-Aug-1996	5,259,916	10-Jul-2001	PCSI P068US Exhibit 2
45	97RSS167	Bipolar Analog Multipliers for Low Voltage Applications	Granted	08/445,088	07-Jun-1995	5,570,056	29-Oct-1998	PCSI P026US Exhibit 2
46	97RSS168	Dual Frequency Synthesis System	Granted	09/163,735	30-Sep-1995	5,127,900	03-Oct-2000	
47	97RSS179	Retransmission Packet Capture System Within a Wireless Multiservice Communications Environment	Granted	08/823,722	04-Sep-1997	5,145,108	07-Nov-2000	
48	97RSS178	Retransmission Packet Capture System Within a Wireless Multiservice Communications Environment	Granted	08/038,724	10-Mar-1998	5,139,260	24-Oct-2000	
49	97RSS184	Using a Single Low-Noise Amplifier in a Multi-Band Wireless Station	Granted	08/164,188	30-Sep-1998	5,134,427	17-Oct-2000	
50	97RSS200	Digital Phase Lock Loop Divider Cycling Method, Apparatus, and Communication System Incorporating the Same	Granted	08/160,884	25-Sep-1998	5,114,888	05-Sep-2000	
51	97RSS201	Dual Band Transmitter for a Cellular Phone Comprising a PLL	Granted	09/163,798	30-Sep-1998	5,150,990	21-Nov-2000	
52	97RSS202	Transmitter Circuitry for a Cellular Phone	Granted	08/158,878	23-Sep-1998	5,304,748	16-Oct-2001	
53	97RSS209	Stability and Enhanced Gain of Amplifiers Using Inductive Coupling	Granted	09/016,195	30-Jan-1999	5,211,738	03-Apr-2001	
54	97RSS242	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	145,745	29-Oct-1983	5,444,566	22-Aug-1995	



55	97RSS291	Frequency Reference Compensation	Granted	08/110,611	24-Aug-1998	\$5,542,095	30-Jul-1998	PCSI P009US Exhibit 2
56	97RSS311	Modulator and Process for Minimizing Power Consumption and Communication System Employing Same	Granted	09/161,154	25-Sep-1998	\$3,263,027	17-Jul-2001	
57	97RSS312	Method and Apparatus for Improving Modulation Accuracy	Granted	09/103,418	24-Jun-1998	\$3,268,618	31-Jul-2001	
58	97RSS323	Dual Band Cellular Phone With Two Power Amplifiers and Power Control Circuit Therefor	Granted	09/103,897	24-Jun-1998	\$3,154,984	28-Nov-2000	
59	97RSS324	Cellular Phone With a Logarithmic Detector	Granted	09/103,899	24-Jun-1998	\$3,163,709	18-Dec-2000	
60	97RSS325	Dual Band Cellular Phone With Two Power Amplifiers and a Current Detector for Monitoring the Consumed Power	Granted	09/103,898	24-Jun-1998	\$3,151,509	21-Nov-2000	
61	97RSS343	Power Management for a Telephone System by Dynamically Adjusting Transmission Power	Granted	09/104,732	25-Jun-1998	\$3,258,478	03-Jul-2001	
62	97RSS347 (WCD)	System and Method for Wireless Voice and Computer Communications	Granted	09/109,987	30-Jun-1998	\$3,327,476	04-Dec-2001	
63	97RSS348	Multi-Functional Battery Management Module Operable in a Charging Mode and a Battery Pack Mode	Granted	09/060,425	14-Apr-1998	\$3,100,870	08-Aug-2000	
64	97RSS361	Variable Gain Amplifier with Gain Linear with Control Voltage	Granted	09/163,885	30-Sep-1998	\$3,124,761	28-Sep-2000	
65	97RSS383	High-Linearity, Low-Spread Variable Capacitance Array	Granted	09/081,542	19-May-1998	\$3,181,218	30-Jan-2001	
66	97RSS450	Power Management System for a Mobile Station	Granted	08/959,588	29-Oct-1997	\$3,044,088	28-Mar-2000	
67	97RSS451	Power Management System for a Mobile Unit by Intelligent Page Monitoring	Granted	09/056,572	07-Apr-1998	\$3,240,288	29-May-2001	
68	97RSS458	Cellular Telephone	Granted	088,535	14-Apr-1998	\$3,408,398	20-Apr-1998	

68	97RSS482	Double Balance Differential Active Ring Mixer With Current Shared Active RF Input Balun	Granted	09/087,315	29-May-1998	\$,057,714	02-May-2000	
70	97RSS484	Method and Apparatus for Enhanced Performance in a System Employing Convolutional Decoding	Granted	09/021,888	11-Feb-1998	\$,192,500	20-Feb-2001	
71	97RSS474	Amplifier Module With Two Power Amplifiers for Dual Band Cellular Phones	Granted	09/018,242	30-Jan-1998	\$,075,995	13-Jun-2000	
72	97RSS479	Method and Apparatus for Improving the Sensitivity of an RF Receiver at Certain Frequencies	Granted	09/153,008	11-Sep-1998	\$,192,228	20-Feb-2001	
73	97RSS480	Integrated Battery Compartment and Hinge	Granted	09/073,725	07-May-1998	\$,219,257	17-Apr-2001	
74	97RSS495	Apparatus and Method for Implementing a Low-Noise Amplifier	Granted	09/201,843	30-Nov-1998	\$,275,887	14-Aug-2001	
75	97RSS497	Receiver for RF Signals	Granted	09/203,001	30-Nov-1998	\$,298,228	02-Oct-2001	
76	97RSS528	Method and Apparatus for Sharing Transmit Shaping Filters Among Phase Shifted Signals	Granted	09/184,428	30-Sep-1998	\$,181,674	30-Jan-2001	
77	98RSS009	Phase Interpolated Fractional-N Frequency Synthesizer With On-Chip Tuning	Granted	09/108,847	01-Jul-1998	\$,064,272	18-May-2000	
78	98RSS014	A Compact and Fast Cubic Function Generator	Granted	09/148,588	04-Sep-1998	\$,180,428	12-Dec-2000	
79	98RSS015	Flexible Transfer Function Generator	Granted	09/144,404	31-Aug-1998	\$,321,072	20-Nov-2001	
80	98RSS058	Intelligent Control of Receiver Linearity Based on Interference	Granted	09/160,613	24-Sep-1998	\$,311,048	30-Oct-2001	
81	98RSS134	Method of Independently Creating and Using a Garbage Model for Improved Rejection in a Limited-Training Speaker-Dependent Speech Recognition System	Granted	09/134,177	14-Aug-1998	\$,223,155	24-Apr-2001	
82	98RSS178	System and Method for Dynamically Varying Operational Parameters of an Amplifier	Granted	09/222,688	29-Dec-1998	\$,327,482	04-Dec-2001	
83	98RSS202	Cooling System for Power Amplifier and Communication System Employing the Same	Granted	09/170,029	13-Oct-1998	\$,134,110	17-Oct-2000	

84	98RSS238	Phase/Frequency Detector with Time-Delayed Inputs in a Charge Pump Based Phase Locked Loop and a Method for Enhancing the Phase Locked Loop Gain	Granted	08/383,779	28-Jul-1999	8,147,581	14-Nov-2000	
85	98RSS255	Phase Lock Loop Used as Up Converter and for Reducing Phase Noise of an Output Signal	Granted	08/405,749	30-Sep-1998	8,255,912	03-Jul-2001	
86	98RSS259	Gated delay-locked loop for clock generation applications	Granted	09/302,755	30-Apr-1999	8,208,183	27-Mar-2001	
87	98RSS261	Source-switched or gate-switched charge pump having cascoded output	Granted	09/302,666	30-Apr-1999	8,180,432	12-Dec-2000	
88	98RSS267	Fully Integrated Broadband RF Voltage Amplifier with Enhanced Voltage Gain and Method	Granted	09/406,768	27-Sep-1998	6,285,944	24-Jul-2001	
89	98RSS268	Low Noise Low Power Charge Pump System for Phase Lock Loop	Granted	09/405,752	27-Sep-1999	6,215,383	10-Apr-2001	
90	98RSS271	System and Process for Shared Functional Block Communication Transceivers With GPS Capability	Granted	09/256,450	23-Feb-1998	6,208,844	27-Mar-2001	
91	98RSS280	Power Amplifier Driver System for Wireless Handset	Granted	09/328,927	09-Jun-1999	6,338,381	15-Jan-2002	
92	98RSS285	Power Amplification Using A Direct-Downconverting Quadrature Mixer Topology	Granted	09/318,482	25-May-1999	6,307,894	23-Oct-2001	
93	98RSS288	Envelope Peak and Trough Limiting to Improve Amplifier Efficiency and Distortion Characteristics	Granted	09/318,529	25-May-1999	6,242,975	05-Jun-2001	
94	98RSS304	Phase-Locked Loop Having Temperature-Compensated Bandwidth Control	Granted	09/314,888	16-May-1999	6,211,743	03-Apr-2001	
95	98RSS307	Log-Domain Filter Having a Variable Dynamic Range Window	Granted	09/322,401	28-May-1999	6,282,623	17-Jul-2001	

96	98RSS319	Six Inverting Amplifier Transconductance Stage and Methods for its Use	Granted	09/385,225	27-Aug-1999	191,655	20-Feb-2001	
97	98RSS336	Method and Apparatus for Extending a VCO Tuning Range	Granted	08/498,378	03-Feb-2000	6,204,734	20-Mar-2001	
98	98RSS005	A Method and Apparatus for Improving RF Contact Positioning in an RF Test Socket	Granted	09/360,586	28-Jul-1999	6,227,876	08-May-2001	
99	98RSS015	Power Amplifier Operated as an Envelope Digital to Analog Converter with Digital Pre-Distortion	Granted	09/410,216	30-Sep-1999	6,255,906	03-Jul-2001	
100	98RSS025	System and Method For Variable Gain Coder-Decoder	Granted	09/378,325	20-Aug-1999	6,252,528	28-Jun-2001	
101	99RSS042	Differential Oscillator	Granted	09/388,957	25-Aug-1999	6,249,190	18-Jun-2001	
102	98RSS098	Peer-To-Peer Data Transfer Using Pre-Existing Caller ID Class FSK Signaling Infrastructure	Granted	08/328,048	08-Jun-1998	6,304,642	16-Oct-2001	
103	98RSS220	Method and Apparatus for Code Error Correction	Granted	08/131,078	01-Oct-1993	5,497,700	13-Feb-1998	PCSI P013US Exhibit 2
104	98RSS354	Apparatus and Method for Increasing Data Transmission Rate Over Wireless Communication Systems Using Spectral Shaping	Granted	099,080	28-Jul-1993	5,388,590	31-Jan-1995	
105	98RSS355	Apparatus and Method For Increasing Data Transmission Rate Over Wireless Communication Systems Using Spectral Shaping	Granted	147,149	03-Nov-1993	5,507,033	09-Apr-1998	
106	98RSS356	Apparatus and Method for Compensating for Limiter Induced Non-Linear Distortion in a Wireless Data Communication System	Granted	198,085	17-Feb-1994	5,533,048	02-Jul-1998	
107	98RSS357	Method of Internal Interference Cancellation in TDMA Receiver	Granted	09/495,893	01-Feb-2000	6,259,752	10-Jul-2001	

108	97RSS372 (PTD)	Compensation Technique Using MOS Capacitance	Granted	09/163,789	30-Sep-1998	6,087,896	11-Jul-2000	
109	97RSS088 (PTD)	CMOS Electrostatic Discharge Protection Circuit With Minimal Loading for High Speed Circuit Applications	Granted	09/163,875	30-Sep-1998	6,292,045	18-Sep-2001	
110	95E117	Effectively Differential, Multiple Input OR/NOR Gate Architecture	Granted	08/752,016	19-Nov-1988	5,945,845	31-Aug-1999	
111	97RSS005	A System and Method for a Monolithic Directional Microphone Array	Granted	08/974,874	20-Nov-1997	3,192,134	20-Feb-2001	
112	97RSS008	Method and Apparatus for Sensing an Audio Signal That is Sensitive to the Audio Signal and Insensitive to Background Noise	Granted	08/920,848	29-Aug-1997	3,072,882	08-Jun-2000	
113	97RSS103	Self-Test and Status Reporting System for Microcontroller-Controlled Devices	Granted	09/347,889	06-Jul-1998	5,104,304	15-Aug-2000	
114	97RSS460	Convolution Decoding Terminated by an Error Detection Block Code with Distributed Parity Bits	Granted	09/021,898	11-Feb-1998	3,198,190	08-Mar-2001	
115	98RSS114	Low-Voltage Dual-Modulus Prescaler Circuit Using Merged Pseudo-Differential Logic	Granted	09/163,882	30-Sep-1998	3,157,683	05-Dec-2000	
116	98RSS258	Interfaced Master Slave ECL Flip Flop	Granted	09/405,964	30-Sep-1998	3,191,629	20-Feb-2001	
117	00CXT0105T	Planar HBT-FET Device	Granted	949,901	23-Sep-1992	5,250,828	05-Oct-1993	
118	93E050	Small Size, High Speed GaAs Data Latch	Granted	727,958	26-Apr-1985	4,707,808	17-Nov-1987	
119	00CXT0181W	Method and Apparatus for Dual Demodulation of Mobile Channel Signals	Granted	494,712	28-Jun-1985	5,517,530	14-May-1998	
120	95E082	Echo Canceling Method and Apparatus in a Communication Device	Granted	08/568,843	07-Dec-1995	5,933,494	03-Aug-1999	
121	97RSS161	Dual Source for Constant and PTAT Current	Granted	555,424	30-Nov-1995	5,774,013	30-Jun-1998	PCSI P046US Exhibit 2
122	95E082	Frequency Error Compensation for Direct Sequence Spread Spectrum Systems	Granted	08/568,085	06-Dec-1995	5,732,111	24-Mar-1998	

123	95E063	Frequency Acquisition Method for Direct Sequence Spread Spectrum System	Granted	08/447,538	10-Nov-1998	6,222,874	24-Apr-2001	
124	95E063	Frequency Acquisition Method for Direct Sequence Spread Spectrum System	Granted	08/568,058	05-Dec-1995	5,799,034	25-Aug-1998	
125	95E089	Gain Imbalance Compensation for a Quadrature Receiver in a Cordless Direct Sequence Spread	Granted	08/568,210	06-Dec-1995	5,930,288	27-Jul-1999	
126	95E089	Gain Imbalance Compensation for a Quadrature Receiver in a Cordless Direct Sequence Spread	Granted	08/325,109	03-Jun-1999	6,307,902	23-Oct-2001	
127	97RSS297DIV	Frequency Controller and Method of Correcting Phase Estimates in a PSK Demodulator Using Frequency Control System and Method for Dynamically Varying Operational Parameters of an Amplifier	Granted	08/467,455	07-Jun-1995	5,564,758	14-Jan-1997	PCSI P008US3 Exhibit 2
128	98RSS178	Tuning Recovery Controller and Method for Adjusting the Timing of Synchronizing Windows in a PSK Demodulator	Granted	08/222,688	29-12-1998	8,327,462	04-Dec-2001	
129	97RSS156DIV	Phase Estimation and Synchronization Using a PSK Demodulator	Granted	08/472,125	07-Jun-1995	5,925,852	29-Apr-1997	PCSI P008US2 Exhibit 2
130	97RSS220	Pre-Quantization in Motion Compensated Videocoding	Granted	07/898,210	31-Dec-1992	5,376,884	27-Dec-1994	PCSI P008US Exhibit 2
131	98E005 (PTD)	Method and Apparatus for Wireless Testing of Integrated Circuits	Granted	09/008,972	14-Jan-1998	6,275,527	14-Aug-2001	
132	97RSS010 (PTD)	CID Demodulator for DCT Multiple Antenna Home Base for Digital Cordless Telephones	Granted	08/048,011	23-Mar-1998	6,331,762	18-Dec-2001	
133	95E074		Granted	08/589,489	07-Dec-1995	5,828,708	27-Oct-1998	
134	97RSS091		Granted	08/573,128	15-Dec-1995	5,861,762	26-Aug-1997	PHS
135	97RSS104		Granted	08/898,217	19-Aug-1998	5,848,982	15-Jul-1997	PHS

136	97RSS155	Unique Word Detector and Method for Detecting a Unique Word with one of Several Windows Offset Time	Granted	08/472,121		5,524,127	04-Jun-1988	PHS
137	97RSS155	Phase detector and a method determining the phase of received PSK symbols	Granted	08/289,081		5,610,949	11-Mar-1997	PHS
138	97RSS157	Method and Apparatus of Frequency Generation for use With Digital Cordless Telephone	Granted	08/013,825		5,722,040	24-Feb-1988	PHS
139	97RSS159	ADPCM Coding and Decoding Techniques for Personal Communication Systems	Granted	08/191,609		5,615,222	25-Mar-1997	PHS
140	97RSS185	Multiple Antenna Home Base for Digital Cordless Telephones	Granted	08/573,267		5,696,798	09-Dec-1997	PHS
141	97RSS295	Method and Apparatus for Frequency Synthesization in Digital Cordless Telephones	Granted	08/131,210		5,528,527	11-Jun-1988	PHS
142	97RSS454	Avoiding Interference From a Potentially Interfering Transmitter in a Wireless Communication System	Granted	09/163,972		5,258,477	03-Jul-2001	PHS

DISPUTED WITH BOEING

DOCXT0143W	Soft-Decision Classifier	Granted	388,384	09-Dec-1992	BOE	5,351,378	01-Nov-1994
DOCXT0095W	Resistive Planar Ring Double-Balanced Mixer	Granted	576,755	04-Sep-1990	BOE	5,125,111	23-Jun-1992
DOCXT0096N (PTD)	Large Array MMIC Feedthrough	Granted	540,984	08-Jun-1990	BOE	5,132,648	21-Jul-1992
DOCXT0098T	Stress-Free Chemo-Mechanical Polishing Agent for II-VI Compound Semiconductor Single Crystals and Method of Polishing	Granted	787,154	04-Nov-1991	BOE	5,157,876	27-Oct-1992
DOCXT0101T	Technique for Doping MOCVD Grown Crystalline Materials Using Free Radical Transport of the Copant Species	Granted	858,940	19-Feb-1991	BOE	5,202,283	13-Apr-1993
DOCXT0108T	Technique for Doping Mercury Cadmium Telluride MOCVD Grown Crystalline Materials Using Free Radical Transport of Elemental Indium and Apparatus Therefor	Granted	857,692	19-Feb-1991	BOE	5,306,860	28-Apr-1994
DOCXT0113W	Moving Vehicle Classifier with Nonlinear Mapper	Granted			BOE	5,337,257	09-Aug-1994
DOCXT0084T	Isolated Low Power Thyristor Gate Drive Circuit	Granted	740,465	03-Jun-1985	BOE	4,631,472	23-Dec-1988
DOCXT0133W	Large Time-Bandwidth Chirp Pulse Generator	Granted	102,924	08-Aug-1993	BOE	5,428,361	27-Jun-1995
DOCXT0140N	Moving Vehicle Classifier With Iterative Deconvolver Estimator	Granted	76,077	11-Jun-1993	BOE	5,387,475	22-Nov-1994



US Pending Patent Applications filed with USPTO

CASE NO.	TITLE	STATUS	NO.	DATE
00CXT0018W	VCO Tuning Curve Compensated Charge Pump Current Synthesizer	Pending	09/675,888	29-Sep-2000
00CXT0040W	Power amplifier with provisions for varying operating voltage based upon power amplifier output power	Pending	09/782,880	23-Feb-2001
00CXT0045W	Multi-Level Power Amplifier	Pending	09/880,288	13-Jun-2001
00CXT0070W	IC Capacitor Trimming Using Fuses	Pending	10/121,368	11-Apr-2002
00CXT0072W	Longitudinally-Coupled Saw Filter Enhanced Frequency Selectivity	Pending	09/545,232	07-Apr-2000
00CXT0283W	System for Closed Loop Power Control Using a Linear or a Non-Linear Power Amplifier	Pending	09/650,987	30-Aug-2000
00CXT0308W	Transmitter Architecture having a Secondary Phase-Error Correction Loop including an Amplitude Reconstruction System	Pending	09/650,831	30-Aug-2000
00CXT0310W	System for Allowing a TDMA/CDMA Portable Transceiver to Operate with Closed Loop Power Control	Pending	09/665,820	20-Sep-2000
00CXT0323W	Multiple Step Switched Translation Loop for Power Amplifier Feedback Control	Pending	09/666,898	21-Sep-2000
00CXT0325W	Dual-Feedback Translation Loop	Pending	09/666,577	21-Sep-2000
00CXT0350W	Dynamically Biased Power Amplifiers	Pending	09/616,285	27-Mar-2001
00CXT0377W	Digitally Controlled Bias Circuit for Amplifiers	Pending	09/617,888	28-Mar-2001
00CXT0484W	Amplification Control Scheme for a Receiver	Pending	09/623,488	30-Mar-2001
00CXT0517W	Terminal Arrangement for an Electrical Device	Pending	09/677,182	02-Oct-2000
00CXT0521W	A Charge Pump Having Reduced Switching Noise	Pending	09/718,883	21-Nov-2000
00CXT0523W	Fast Settling Charge Pump	Pending	09/718,615	21-Nov-2000
00CXT0526W	Fast-Acquisition Phase-Locked Loop	Pending		01-Nov-2001
00CXT0608W	Power Amplifier Circuit for Providing Constant Bias Current Over a Wide Temperature Range	Pending	09/722,772	27-Nov-2000
00CXT0618W	Current Mirror Compensation System for Power Amplifiers	Pending	09/772,717	30-Jan-2001

00CXT00841W	Integrated on Chip VCO Calibration Algorithm to Extend VCO Tuning Range	Pending		02-Apr-2002		
00CXT00856W	Constant Current Biasing Circuit for Linear Power Amplifiers	Pending	09/893,398	21-Oct-2000		
00CXT00859W	Configurable Power Amplifier and Bias Control	Pending	07/971,533	05-Oct-2001		
00CXT00882W	Harmonic Cancellation Mbers	Pending	08/823,314	30-Mar-2001		
00CXT00718W	Bias Enhancement Circuit for Linear Amplifiers	Pending	09/715,871	15-Nov-2000		
00CXT00733W	Continuous Closed-Loop Power Control System Including Modulation Injection in a Wireless Transceiver Power Amplifier	Pending	08/704,830	02-Nov-2000		
00CXT00818W	Frequency Plan	Pending	08/823,880	30-Mar-2001		
01CXT00011W	Low Voltage Integrated Bandgap Reference for an HBT Linear Power Amplifier	Pending		30-Apr-2002		
01CXT00014W	Closed Loop Power Amplifier Control	Pending	00/280,708	30-Mar-2001		
01CXT00018W	Doherty Bias Circuit for Dynamically Compensating for Environmental Variations	Pending	08/851,788	10-Sep-2001		
01CXT00019W	Dual Mode PA Having a Common Controller	Pending	10/137,718	30-Apr-2002		
01CXT00149W	Systems for Controlling the Frequency of an Oscillator	Pending	09/823,316	30-Mar-2001		
01CXT00178W	System for Controlling the Amplitude of an Oscillator	Pending	09/823,285	30-Mar-2001		
01CXT00179W	Low Voltage Interface	Pending	08/823,881	30-Mar-2001		
01CXT00180W	Interference Reduction for Direct Conversion Receivers	Pending	09/823,313	30-Mar-2001		
01CXT00181W	Switched Capacitor for Analog Integrated Circuits	Pending	09/823,679	30-Mar-2001		
01CXT00201W	Method & Apparatus Multipath Signal Detection, Identification, and Monitoring for W-CDMA	Pending	00/275,032	12-Mar-2001		10/096,429
01CXT00202W	Method & Apparatus for Spread Spectrum Radio Signal Recovery in Wideband Spread Communication Systems	Pending	00/275,192	12-Mar-2001		10/096,445

01CXT0235W	A Stable Epitaxial Emitter Ballast for Heterojunction Bipolar Transistors (HBT's) by Modulated Emitter Cap Doping Profile	Pending	10/115,317	03-Apr-2002		
01CXT0341T (PTD)	A Low Current and High Performance BIFET Low Noise Amplifier (LNA)	Pending	10/057,098	23-Jan-2002		
95E080	Method and Apparatus for Signal Quality Estimation in a Direct Sequence Spread Spectrum...	Pending	588,330	08-Dec-1995		
95E082	Echo Canceling Method and Apparatus in a Communication Device	Pending	09/220,123	23-Dec-1998		
95E088	12 Chip Coded Spread Spectrum Modulation for Direct Conversion Radio Architectures in a Digital Cordless Telephone	Pending				
96E085	Intermediate Frequency Amplifier Circuit for Use in Receive and Transmit Modes	Pending	09/752,787	20-Nov-1998		
97RSS006	Method and Apparatus for Sensing an Audio Signal That is Sensitive to the Audio Signal and Insensitive to Background Noise	Pending	09/481,728	27-Jan-2000		
97RSS057	Multiple Half-Burst Phase Rotation for High Frequency Demodulation	Pending	09/184,534	30-Sep-1998		
97RSS063	Power Amplifier Saturation Prevention Method, Apparatus and Communication System Incorporating the Same	Pending	09/152,439	14-Sep-1998		
97RSS068	Device and Process for Coupling Multi-Band Transmitters and Receivers and Communication System Employing Same	Pending	09/160,877	11-Oct-2000		
97RSS069	Using a Low Frequency Timer to Restore Timing to a High Frequency Timer	Pending	09/184,432	30-Sep-1998		
97RSS073 97RSS00W	A System and Method for Extending the Range of a Base Unit	Pending	09/072,198	31-Jul-2000		
97RSS101	Automatic GSM Mobile Power	Pending	10/029,451	21-Oct-2000		
97RSS107 CON	Apparatus for and Method of Improving Efficiency of Transceivers in Radio Products	Pending	09/161,811	25-Sep-1998		
		Pending	09/672,235	27-Sep-2000		

97RSS108	Cellular Telephone Keypad/Acoustic Isolation Device/LCD	Pending	09/108,888	29-Sep-1998	
97RSS115	Dual Mode Phone Architecture Utilizing a Single Transmit-Receive Switch	Pending	09/013,235	26-Jan-1999	
97RSS118CIP (WCD)	RF Architecture for Cellular Dual Band Telephones	Pending	09/388,257	31-Aug-1998	
97RSS124	Method and System for Efficiently Transmitting Energy from an RF Device	Pending	09/361,885	27-Jul-1998	
97RSS125	Wide Frequency Range Couplers and Detectors for Power Detection in Multiple Frequency Band Systems	Pending	09/081,702	20-May-1998	
97RSS127	Integrated Power Management Module	Pending	09/080,428	14-Apr-1998	
97RSS178	System and Method for Receiving A Signal	Pending	09/409,484	30-Sep-1999	
97RSS178/1	System and Method for Receiving A Signal	Pending	10/033,203	28-Dec-2001	
97RSS203	Device, System and Method for Low Noise Radio Frequency Transmission	Pending	09/160,690	25-Sep-1998	
97RSS205	Device and Process for Coupling Multi-Band Transmitters and Receivers and Communication System Employing Same	Pending	09/160,640	25-Sep-1998	
97RSS208	System and Process for Shared Frequency Source Multi-Band Transmitters and Receivers	Pending	09/203,845	01-Dec-1998	
97RSS329	Switchable High-Low Side Mixer for the Translational IC for Dual Mode Application	Pending	09/295,036	20-Apr-1999	
97RSS331	First Party Signaling for Call Waiting Calling Number Identification (CWCID) System	Pending	09/823,447	04-Sep-1997	
97RSS336	Direct Conversion Time Division Duplex, Radio, Direct Sequence Spread Spectrum Cordless Telephone	Pending	09/107,733	30-Jun-1998	
97RSS338	Techniques to Increase Data Transmission Rate of Spread Spectrum Communications Systems	Pending	09/325,107	03-Jun-1999	
97RSS347	System and Method for Wireless Voice and Computer Communications	Pending	09/300,582	27-Apr-1999	
97RSS347	System and Method for Wireless Voice and Computer Communications	Pending	09/974,769	09-Oct-2001	

97RSS382	Variable Gain Amplifier with High Linearity and Low Noise	Pending	09/163,682	30-Sep-1998		
97RSS371	Method for Programming a Radio Transceiver	Abandoned	09/410,217	30-Sep-1998		
97RSS382	Adaptive Wireless Communication Receiver	Pending	09/163,797	30-Sep-1998		
97RSS449	Traffic Channel Quality Estimation from a Digital Control Channel	Pending	09/046,080	23-Mar-1998		
97RSS450	Power Management System for a Mobile Station	Pending	09/498,911	08-Feb-2000		
97RSS480	Convolution Decoding Terminated by an Error Detection Block Code with Distributed Parity Bits	Published	09/761,259	16-Jan-2001		
97RSS481	Enhanced Keypad Control for Portable Communication Device	Pending	09/073,724	07-May-1998		
ABANDONED						
97RSS483	External Connector and Battery Extension Pack for a Portable Communication Device	Pending	09/137,194	20-Aug-1998		
97RSS494	Power Management System for a Mobile Unit by Reduced Neighbor Cell Scanning	Pending	09/084,534	26-May-1998		
97RSS503	Full-Duplex Speakerphone With Wireless Microphone	Pending	09/144,842	31-Aug-1998		
97RSS518	Turbo Decoding of Trellis-Coded Modulations	Pending	09/410,220	30-Sep-1998		
98RSS014	A Compact and Fast Cubic Function Generator	Pending	09/706,483	03-Nov-2000		
98RSS024	Method of and Apparatus for Adaptation of an Echo Canceller in a System With Multitasking	Pending	09/128,382	03-Aug-1998		
98RSS031	A Method and Apparatus for Dynamically Switching Between Speech Coding Techniques	Pending	09/153,831	15-Sep-1998		
98RSS084	System and Method for Providing a Trap and Patch Function to Low Power, Cost Conscious, and Space Constrained Applications	Pending	09/232,881	15-Jan-1998		
98RSS089	System and Method for Communication Parameter Determination	Pending	09/157,209	18-Sep-1998		
98RSS072	Apparatus and Method for Improving Power Control Loop Linearity	Pending	09/161,014	25-Sep-1998		

98RSS086	Multi-Line Recording Device Having Reduced Processing and Storage Requirements	Pending	09/163,263	29-Sep-1998		
98RSS097	Wireless Communications Device Allowing a Soft Handoff Procedure in a Mobile Communications System	Pending	09/342,165	28-Jun-1998		
98RSS112	Dynamic Range Reduction Circuitry for a Digital Communications Receiver	Pending	09/159,328	23-Sep-1998		
98RSS121	Frequency Hopping Spread Spectrum Modulation and Direct Sequence Spread Spectrum Modulation Cordless Telephone	Pending	09/137,188	20-Aug-1998		
98RSS185	A Method to Generate a Secure Wireless Link Between a Handset and Basestation in a Cordless Phone System Without Any Wired Connection ...	Pending	09/216,380	18-Dec-1998		
98RSS177	Method and Apparatus for Saving Power During Punctured Transmission of Mobile Communications	Pending	09/205,523	03-Dec-1998		
98RSS179	System and Method for Selecting Amplifiers in a Communications Device	Pending	09/222,063	29-Dec-1998		
98RSS180	System and Method for Selectively Interconnecting Amplifiers in a Communications Device	Pending	09/222,672	29-Dec-1998		
98RSS180	System and Method for Selectively Interconnecting Amplifiers in a Communications Device	Pending		23-Oct-2001		
98RSS189	Secondary Automatic Gain Control Loops for Direct Conversion CDMA Receivers	Pending	09/382,862	25-Aug-1998		
98RSS201	System and Process for Shared Functional Block CDMA and GSM Communication Transceivers	Pending	09/206,315	23-Apr-1998		
98RSS207	Method and System Which Uses Sound Wave Based Communication to Generate A Secure Wireless Link Between A Handset and Base Station	Pending	09/216,086	18-Dec-1998		
98RSS257	Programmable relaxation oscillator	Pending	09/302,754	30-Apr-1998		
98RSS276	System and Method for Amplifying a Cellular Radio Signal	Pending	09/408,754	30-Sep-1999		
98RSS280	Power Amplifier Driver System for Wireless Handset	Pending	09/328,927	09-Jun-1998		
98RSS283	Method and Apparatus for Filter Selection From Frequency Synthesizer	Pending	09/392,825	09-Sep-1998		

98RSS291	Mixer Circuit with On-Chip Transformer	Pending	09/371,311	10-Aug-1999	
98RSS321	Dual Tune Input-Integrated VCO on a Chip	Pending	09/708,921	08-Nov-2000	
98RSS347	Performance Improvement of Internet Protocols Over Wireless Connections	Pending	09/375,607	17-Aug-1999	
98RSS350	Programmable Frequency Divider	Pending	09/370,089	08-Aug-1999	
98RSS350	Frequency Divider with Low Harmonics	Pending	09/831,833	30-Mar-2001	
98RSS351	Packaging of Surface Acoustic Wave (SAW) Filters on a Multi Chip Module	Pending	09/455,108	08-Dec-1999	
98RSS396	Multi-Band Transceiver Having Multi-Slot Capability	Pending	09/387,038	31-Aug-1999	
98RSS012	System and Method for Cordless Telephonic Communication	Pending	09/756,039	05-Jan-2001	
98RSS025	System and Method For Variable Gain Coder-Decoder	Pending	09/845,840	30-Apr-2001	
98RSS030	Multi-Band Filter System For Wireless Communication Receiver	Pending	09/330,646	11-Jun-1999	
98RSS032	Differential Oscillator	Pending	09/675,239	29-Sep-2000	
98RSS037	System and Method for Receiving Analog and Digital Signals	Pending	09/383,122	25-Aug-1999	
98RSS057	A Method to Combine the Detection of Slotted Dial Tone and VMMI FSK Signals Integrated Within a Telephone	Pending	09/299,202	23-Apr-1999	
98RSS065	Direct Conversion Receiver	Pending	09/260,919	02-Mar-1999	
98RSS065	Direct Conversion Receiver	Pending	09/356,965	31-Aug-1999	
98RSS069	Peer-to-Peer Data Transfer Using Pre-existing Caller ID Class FSK Signaling Infrastructures	Pending	09/363,968	18-Jul-1999	
98RSS077	Local Area Internet Radio Receiver/Transmitter	Pending	09/407,149	28-Sep-1999	
98RSS078	System for Controlling a Class D Amplifier	Pending	09/614,198	21-Mar-2001	
98RSS082	System and Process for Supporting Multiple Wireless Standards With a Single Circuit Architecture	Pending	09/410,138	30-Sep-1999	
98RSS083	System for Using Adaptive Circuitry To Improve Performance and Provide Linearity and Dynamic Range on Demand	Pending	09/881,932	15-Jun-2001	

99RSS085	Avoiding Interference from a Potentially Interfering Transmitter in a Wireless Communication	Pending	09/394,189	13-Sep-1999		
99RSS085	Wireless Communications System Utilizing Directional Wireless Communication Device	Pending	09/621,110	29-Mar-2001		
99RSS086	Cellular Handset with Adjustable Analog to Digital Conversion	Pending	09/410,205	30-Sep-1999		
99RSS086	preprocessor and related frequency translator	Pending	09/281,050	02-Mar-1999		
99RSS086	preprocessor and related frequency translator	Pending	09/386,956	27-Aug-1999		
99RSS102	Direct Sequence Spread Spectrum System with Enhanced Forward Error Correction Code Feature	Pending	09/427,041	19-Oct-1999		
99RSS116	System and Method for Achieving Wireless Communications Coverage in a Local Area	Pending	09/409,297	29-Sep-1999		
99RSS130	Hands-Free Activation of a Personal Communication Device	Pending	09/388,909	15-Sep-1999		
99RSS136	Simple Dual Band Multi Time Slot Receiver Architecture	Pending	09/392,355	08-Sep-1999		
99RSS138	System of and Method for Compensating a Baseband Signal to Reduce Third Order Modulation Distortion	Pending	09/515,538	29-Feb-2000		
99RSS161	A Novel Technique for Generation of Phase/Frequency Modulated Signals	Pending	09/398,911	14-Sep-1999		
99RSS172	A Balun Circuit for Combining Differential Power Amplifier Outputs	Pending	09/389,883	31-Aug-1999		
99RSS174	A GmC Filter and Method for Suppressing Unwanted Signals Introduced by the Filter	Pending	09/663,848	18-Sep-2000		
99RSS198	Method and Apparatus for Multiple Phase Splitting for Dual Band IQ Subharmonic Mixer	Pending	09/506,302	17-Feb-2000		
99RSS213	Dynamically Varying Linearity System for an RF Front-End of a Communication Device	Pending	09/811,082	16-Mar-2001		
99RSS232	Smart Current System for Dynamically Varying the Operating current of a Frequency Source in a Receiver	Pending	09/793,744	28-Feb-2001		
99RSS297	System of and Method for Reducing or Eliminating the Unwanted Sideband in the Output of a Transmitter Comprising a Quadrature Modulator Followed by a	Pending	09/514,501	29-Feb-2000		



99RSS301	Transitional Loop DMA Channel for High-Speed Asynchronous Data Transfer	Pending	09/550,852	17-Apr-2000	
99RSS305	Doherty Power Amplifier With Integrated Quarter Wave Transformer/Combiner Circuit	Pending	09/781,100	18-Jan-2001	
99RSS310	System of and Method for Reducing or Eliminating the Unwanted Sideband In a Signal Derived from the Output of a Quadrature Modulator	Pending	09/515,633	29-Feb-2000	
99RSS313	System for Associating User Selectable Information in Wireless Devices	Pending	09/842,601	28-Apr-2001	
99RSS316	Power Amplifier Saturation Detection and Compensation	Pending	09/851,801	30-Aug-2000	
99RSS358	Low-Power Method of Interference Cancellation in GSM Receiver	Pending	09/834,081	08-Aug-2000	
99RSS359	Signal Detector With Echo Cancellation	Pending	09/782,816	23-Feb-2001	
99RSS386	High Efficiency Multiple Power Level Amplifier	Pending	09/698,440	10-Oct-2000	
99RSS397	Non-Linear Transistor Circuits with Thermal Stability	Pending	09/671,517	31-May-2001	
99RSS404	System for Using a Local Wireless Network to Control a Device Within Range of the Network	Pending	09/658,729	11-Sep-2000	
99RSS405	System For Eight Phase 45 Degree Polyphase Filter With Amplitude Matching	Pending	09/666,501	18-Sep-2000	
99RSS408	Polyphase Tuning for Phase Calibration	Pending	09/823,289	30-Mar-2001	
99RSS410	Stacked Core Half-LO Mixer	Pending	09/668,879	25-Sep-2000	
99RSS422	Temperature Compensation Module	Pending	09/712,771	13-Nov-2000	
99RSS426	Trap and Patch System for Virtual Replacement of Defective Volatile Memory Cells	Pending	09/671,401	27-Sep-2000	
99RSS429	Zero-Overhead Symbol Rate Adaptation System for OVSF Code	Pending	09/718,985	22-Nov-2000	
99RSS461	Programmable Silent Ringing System for Communication Systems	Pending	09/650,543	30-Aug-2000	
99RSS468	System and Apparatus for a Direct Conversion Receiver and Transmitter	Pending	09/621,407	21-Jul-2000	

98RSS479	Even Order Non-Linearity Correction Feedback for Gilbert Style Mixers	Pending	08/811,133	16-Mar-2001		
99RSS497	Adaptive Configurable Demodulation System With Multiple Operating Modes	Pending	09/710,784	08-Nov-2000		
99RSS498	Digital Phase/Frequency Detector	Pending	09/799,822	05-Mar-2001		
99RSS500	Burst Detector	Pending	09/735,389	12-Dec-2000		
99RSS504	Variable-Slope Variable-Gain Amplifier	Pending	09/688,689	11-Oct-2000		
97RSS010 (PTD)	Methods for Wireless Testing of Integrated Circuits	Pending	09/764,689	16-Jan-2001		
98RSS288 (PTD)	Electrostatic Discharge Protection Circuit	Pending	09/738,127	15-Dec-2000		
00CXT0280T (PTD)	Improved Transformer Comprising Stacked Inductors	Pending	09/797,307	01-Mar-2001		
00CXT0335T (PTD)	On-Chip Transformers	Pending	09/779,402	08-Feb-2001		
00CXT0822W	Systems for Testing Integrated Circuits	Pending	09/822,820	30-Mar-2001		
97RSS084 CON	A Transistor Having a Novel Layout and an Emitter Having More Than One Feed Point	Pending	09/657,381	13-Oct-2000		
97RSS084 CIP	Transistor Layout	Pending	09/881,921	21-May-2001		
97RSS313	Method and Apparatus for Detecting and Correcting Errors Using Cyclic Redundancy Check	Pending	09/103,421	24-Jun-1998		
97RSS465	Envelope Feedforward Technique with Power Control for Efficient Linear RF Power Amplification	Pending	09/108,828	01-Jul-1998		
98RSS275	RF Transmitter with Extended Efficient Power Control Range	Pending	09/482,121	11-Jan-2000		
99RSS013	RF Transmitter with Extended Efficient Power Control Range	Pending	09/481,094	11-Jan-2000		

99RSS133	Apparatus and Method for Connecting a Cellular Telephone to a Universal Serial Bus	Pending	09/312,064	13-May-1999		
99RSS339 (PTD)	Electrical Contact for Compound Semiconductor Device and Method For Forming Same	Pending	09/675,023	28-Sept-2000		
99RSS385 (PTD)	Electrical Contact for Compound Semiconductor Device & Method for Forming Same	Pending	09/580,323	28-May-2000		
00CX702897 (PTD)	Modified HBT Collector Design for Increased Robustness	Pending	10/034,880	28-Dec-2001		
99RSS143 (PTD)	Electrostatic Discharge Protection Circuit	Pending	09/519,214	3-Mar-2001		
99RSS081 (PID)	Critical Path Adaptive Power Control	Pending	09/614,921	22-Mar-2001		
97RSS475	Polarization-Adaptive Antenna Transmit Diversity System	Pending	09/103,417	24-Jun-1998		
97RSS477	Using Channel Loading Statistics to Determine Whether to Search for a New Channel in a Wireless Communication System	Pending	09/201,076	30-Nov-1998		
99RSS173	Mixing Method for ADPCM Coded Speech Signal Without Performance Critical Threshold Comparisons	Pending	09/234,243	20-Jan-1999		
98RSS284	Efficient Accurate Controller for Envelope Feedforward Power Amplifiers	Pending	09/409,818	30-Sep-1999		
99RSS133	Apparatus and Method for Connecting a Cellular Telephone to a Universal Serial Bus	Pending	09/312,064	13-May-1999		
99RSS292	Device-Independent Interface for Embedded Telephone Applications to a Wireless Spread-Spectrum Link and Audio Processor	Pending	09/479,127	07-Jan-2000		
00CX704301/W (PID)	System and Method for Processing Audio and Video Data in a Wireless Handset	Pending	08/631,511	03-Aug-2000		
00CX704311/W (PID)	System and Method for Processing Audio and Video Data in a Wireless Handset	Pending	08/631,508	03-Aug-2000		
98E005/1	Pre-Quantization in Motion Compensated Videoencoding	Pending	08/828,535	06-Apr-2001		

(PTD)										
98RSS004 (Mindspeed)	System and Method for Adaptive Multirate (AMR) Vocoder	Pending	09/080,013	15-May-1998						
99RSS284 (PCD)	Speaker-Phone System Change and Double-Talk Detection	Pending	09/075,291	29-Sep-2000						

Innovation Disclosures

Innovation Disclosures Assigned to Outside Counsel In Progress

00CXT0070W	Capacitor Trimming Using Fuses		WCD	Assigned	
00CXT0284W	Integrated Auto-Calibration of On Chip VCOs by Winner Selection Algorithm, and Sensitivity Adjustment by Coarse and Fine Varactor Tuning		WCD	Assigned-FBD	
00CXT0522W	Differential-Phase-Locked-Loop Method of Non-Constant Envelope Modulation	10/20/07, 3d0	WCD	Assigned	
00CXT0816W	Adaptive Matching System		WCD	Assigned	
00CXT0817W	Desensitizing Bias Circuit to Prevent RF Interaction		WCD	Assigned	
00CXT0820W	Method for Determining Quality of Dielectric Laminated Substrate		WCD	Assigned	
00CXT0841W	Integrated on Chip VCO Calibration Algorithm to Extend VCO Tuning Range		WCD	Assigned	
01CXT0001W	Using Trimming Hooks to Integrate a Circuit that can Calibrate the VCO Independently Each Time at Circuit Power-up		WCD	Assigned	
01CXT0002W	Monitor the Varactor Capacitance of the Process Thru Process Control Monitor		WCD	Assigned	
01CXT0184W	Supply & Bias Enhancements for Coexistent Power Amplifiers. Second Generation PMIC/PA	10/16/07, 530	WCD	Assigned-FBD	
97RSS398	An Current Compensation Method in Replica Circuit Where the Product of the Transconductance and Resistance is Kept Constant		WCD	Assigned	
98RSS079	Method for Implementing a Radio Transceiver with Digital Signal Processing		WCD	Assigned	
98RSS128	Capacitor Calibration for Current-Tuned Filters		WCD	Assigned	
98RSS200	A Multiple Cascaded OS Offset Correction Scheme Is Proposed For Use in Correcting Offsets Caused By Multiple Cascaded High Gain Baseband Stages in Transceivers		WCD	Assigned	
98RSS246	Switchable Gain Low Noise Amplifier for DCMA/AMPS Applications		WCD	Assigned	
98RSS409	Gain Calibration for Linearity-On-Demand Systems		WCD	Assigned	
00CXT0254W	Power Amp Control Driver Providing Over-Current Protection and		WCD	Assigned-FBD	

	Control Linearization								
00CXT0524W	Feedback-and-Feedforward Closed-Loop Power Control for Amplitude-Modulated Signals				WCD		Assigned-FBD		
02CXT0004W	Software Defined Transmitter for WCDMA, GSM, EDGE, TDMA				WCD		Assigned		
01CXT0288W	GSM/GPRS Transmitter with Synchronous Oscillator Feed				WCD		Assigned		
01CXT0294W	CMOS/BICMOS Subharmonic Mixer for Improved Noise, Power Consumption and Headroom				WCD		Assigned		
01CXT0355W	Use of NiV as Seed Layer for Electroplated Backside Metallization of III-V Semiconductor Circuits				WCD		Assigned		

000CXT0052W	High Performance Dual Tone Deletions in Presence of Speech Interference	WCD	Hold/Assigned	
000CXT0054W	Gated Li-Ion Battery Charger	WCD	Hold-FBD/Assigned	
000CXT00282W	Power Amplifier Saturation Control Scheme	WCD	Hold-FBD/Assigned	
000CXT00463W	A GFSK/GMSK Detector with Enhanced Reception Performance in Cochannel Interference and A WGN Channels	WCD	Hold-FBD/Assigned	
000CXT00471W	Voltage Regulator Based on Switchable Capacitor Array or Simply "Digital LDO"	WCD	Hold-FBD/Assigned	
000CXT00535W	Variable RF Gain Power Amplifier Driver	WCD	Hold-FBD/Assigned	
000CXT00538W	Programmable Dual Power Amplifier Drivers for CDMA Applications	WCD	Hold-FBD/Assigned	
000CXT00885W	A FET/HBT Bias Circuit for Low Voltage Wireless Handsets	WCD	Hold-FBD	
000CXT00899W	High Efficiency Adaptable Power Amplifier	WCD	Hold-FBD	
000CXT00767W	DC Offset Correction Technique for a Direct Conversion Bluetooth Receiver	WCD	Hold-FBD	
000CXT00773W	A Design Technique for the Thermal Stabilization of Wireless Power Amplifiers	WCD	Hold-FBD	
000CXT00798W	Phase Detector Based Upon Look-Up Table	WCD	Hold-FBD	
000CXT00798W	Fast Response Low IF Filter Using Differential Peak Detectors	WCD	Hold-FBD	
000CXT00805W	Acquisition Speed Up for Fractional-N Synthesizers	WCD	Hold-FBD	
000CXT00807W	Resistor Calibration Algorithm	WCD	Hold-FBD	
000CXT00015W	Calibration of Device Using a Linear PA	WCD	Hold/Assigned	
000CXT00017W	Optimum Doherty Topology for Broad Bandwidth	WCD	Hold/Assigned	
000CXT00083W	New Self Oscillating AM Modulator	WCD	Hold-FBD	
000CXT00100W	Linearized Split-Balancing Technique for Power Amplifiers	WCD	Hold-FBD	
000CXT00123W	Dynamically Tuned Embedded Antenna	WCD	Hold-FBD	
000CXT00158W	An Algorithm for Removing Unwanted DC Offset from the Desired Signal at the GSM Receiver	WCD	Hold-FBD	
000CXT00167W	Detection of Strong Unwanted Interfering Signals in Direct	WCD	Hold-FBD	





01CXT0353W	Highly Accurate 45 Signal Generation with Application to Sub-Harmonic Mixers	WCD	Hold-FBD		
02CXT0003W	Switchable VCO Performance in a Time-Division Duplex Communication Device	WCD	Hold-FBD		
02CXT0005W	Varying VCO Performance as Receiver Signal Level Changes	WCD	Hold-FBD		
99RSS387	System for Manufacturing a Stacked Plate Capacitor Having an Interconnect Metal Plate	WCD	Hold-FBD/Assigned		
99RSS423	Improvements to Linearization and High Efficiency in Power Amplifiers	WCD	Hold-FBD/Assigned		
99RSS424	Linearization Improvement in Pas using Split Stage Bias	WCD	Hold-FBD/Assigned		
99RSS488	Blue Tooth VCO Saving Front End Architecture and Device	WCD	Hold-FBD/Assigned		
01CXT0329W	Improving Wafer Yield During Wafer Scribe and Break by Adding a Protective Film at Die Corners	WCD	Hold-FBD		

Innovation Disclosures/CLOSED Status

99RSS484	Bandgap Regulator Using Capacitive Charge Pumping	WCD	CLOSED	
00CXT0251W	Symmetrically-Driven Oscillator with Vertical Structure	WCD	CLOSED	
00CXT0823W	Power Amplifier Having Tunable Bias Ports	WCD	CLOSED	
00CXT0833W	Noise Coupling Reduction Scheme in Dual Fractional-N/Integer-N Frequency Synthesizer	WCD	CLOSED	
00CXT0835W	Quantization Noise Reduction Delta-Sigma Fractional-N Frequency Synthesizer with Digital Frequency Doubler	WCD	CLOSED	
00CXT0836W	Improved Modulus Control Method in Frequency Synthesizers with an Embedded D Flip-Flop	WCD	CLOSED	
00CXT0799W	Feedforward LNA/Mixer Switched Gain Block Architecture	WCD	CLOSED	
00CXT0809W	High Q Digital Varactor	WCD	CLOSED	
01CXT0038W	A CMOS RF Programmable Driver for Bluetooth Applications	WCD	CLOSED	
01CXT0154W	Dynamic Calibration of a Block in a GSM Power Amplifier Control (PAC) Loop with Application to a Block that Converts the Linear Scale to Log Scale	WCD	CLOSED	
01CXT0289W	Active Temperature Compensated RF Power Detector	WCD	CLOSED	
01CXT0308W	New Phase Detection and Lock Circuit for Clock/Freq Synthesis	WCD	CLOSED	
01CXT0310W	A PLL and Clock Independent VCO Tuning Calibration Algorithm	WCD	CLOSED	
01CXT0342W	An Algorithm for Automated Receiver Static Sensitivity Measurement	WCD	CLOSED	

Innovation Disclosures not yet ranked

Case Number	Inv Title	Disclosure Status
98E042	Current Limiting Low Impedance Active Bias Circuit for Power Amplifiers	No Rank
	P Lau	
01CXT0258W (PTD)	Optimized Layout for Power Amplifier Arrays to Reduce Peak Junction Temperature	No Rank
01CXT0354W (PTD)	MCM Construction Using Capped Buried Vias for Heat Transfer and Lower Inductance	No Rank
02CXT0007W (PTD)	A New BiFET Gilbert-cell Mixer	No Rank
02CXT0011W	Audio-Video Synchronization to Support Streaming in UMTS Multimedia Messaging Service (MMS)	No Rank
02CXT0020W	Integration of an Implanted Lateral PNP with a Double Hetero-Junction NPN in an Existing InGaP/GaAs HBT Process Technology	No Rank
02CXT0022W	Method for Forming a Compact R-C-R By-pass Network for Device Ballasting	No Rank

02CXT0025W  
Programmable 8/9 and 8/17 High Frequency Prescaler with a Optimized Supply Current  
No Rank

02CXT0028W  
A Layout Technique Reducing Bipolar Transistor External Base Resistance  
No Rank

02CXT0030T  
Design of a Lateral Metal Insulator Metal Capacitor in a Semiconductor Metal Process to Meet Density and Slotting Rules  
No Rank

02CXT0040W  
Optimized Double Heterostructure Bipolar Transistor Design  
No Rank

02CXT0041W  
A Technique to Efficiently Allocate Computational Resources in a Digital Communication System  
No Rank

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